

ABSTRACT

A substrate processing method which removes an ArF resist film from a wafer having the ArF resist film. As an ultraviolet irradiation process is performed on the 5 ArF resist film, and then an ozone gas and water vapor are fed to the ArF resist film, the ArF resist film is altered in a water-soluble state. Thereafter, the ArF resist film is removed from the substrate by feeding pure water to the ArF resist film altered into the water-10 soluble state.